

DEPARTMENT OF BUILDING AND DEVELOPMENT

COUNTY OF LOUDOUN

MEMORANDUM



DATE: August 28, 2009

TO: Marchant Schneider, Department of Planning

FROM: William Marsh, Environmental Review Team Leader

THROUGH: Gary Clare, Chief Engineer

CC: Joe Gorney, Department of Planning
Amy Lohr, Zoning Administration

SUBJECT: SPEX-2009-0020 and CMPT-2009-0006 Loudoun Water Storage Facility

The Environmental Review Team (ERT) has reviewed the subject application and visited the site with the applicants on August 26, 2009. ERT received a report from Loudoun Water named "Central Water Supply Plan: Final Report" dated September 2008. ERT offers the following comments for this application and general recommendations about the overall project as described in the September 2008 report.

Issues related to SPEX-2009-0020 and CMPT-2009-0006:

1. Staff encourages enhancing the forested buffer adjacent to Goose Creek. Revised General Plan (RGP) policies emphasize the value of forest resources adjacent to streams and steep slopes, as described in the Forest, Trees and Vegetation policies on pages 5-32 and 5-33. Section 3-1008 (G) also requires a restoration plan for the property affected by the special exception, "in its entirety." Staff recommends a commitment to reforestation that does not interfere with existing power line easements and road access widths.
2. ZO Section 3-1008(K) requires and environmental report that assesses environmental impacts of a proposed use within a 2,000 foot radius of the proposed uses. Staff recommends that the utility lines connecting the water storage facility with the river intake and water treatment plan be depicted in this area, where the alignments will minimize disturbance to trees, streams and wetlands. This recommendation is also consistent with General Water and Wastewater Policy 12 of the RGP.
3. Related to comment 2, staff notes a proposed grading permit X20081480001 for stream and wetland mitigation along Sycolin Creek, just upstream of the W&OD trail crossing of Sycolin Creek. The project is to mitigate wetland and stream impacts

proposed by LuckStone adjacent to Bull Run. Staff recommends that any proposed utility lines avoid this mitigation area.

4. Staff recommends that floodplain studies and/or alterations be completed, prior to approval of the commission permit, to update flood elevations and limits for Goose Creek, any possible spillage of Goose Creek into the storage area, and for the minor floodplain that drains from Route 659 to the northwestern edge of the property. Floodplain standards and regulations are found in Chapter 5 of the Facilities Standards Manual and ZO Section 4-1500.

Issues related to "Central Water Supply Plan: Final Report" dated September 2008:

5. Staff encourages an approach that withdraws the minimum Potomac River volume needed to meet the Water Supply Plan goals, because pumping large volumes of water uphill from an intake is energy intensive. General Water Policy 1 of the RGP also encourages long term water conservation. Accordingly, staff offers two recommendations:
 - Thorough and prompt assessment of "Wise Water Use" outcomes to quantify the demand reduction and project this reduction into the two 20 Million Gallon per Day (MGD) phases of the Central Water Supply. There is a similar recommendation on page 25 of the report. Staff recommends a prompter assessment that can be used to possibly reduce the expansion size of each phase and/or elimination of one phase altogether to minimize long term capital and maintenance costs.
 - Consideration of storage, treatment and use of the Town of Leesburg effluent, currently permitted at 5MGD with a future expansion to 10 MGD. The effluent is treated near Tuscarora Creek and would require less static energy lift to transmit and store than river intake water. It would also be available constantly, not just during normal to high river flow intervals. This option was not considered in the Central Water Supply report.

Please contact me if you need additional information or have questions.